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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,636	07/30/2003	Masaaki Suzuki	00684.001674.5	9145
5514	7590 09/23/2004		EXAM	INER
	ICK CELLA HARPEI ELLER PLAZA	MARKOFF, ALEXANDER		
NEW YORK, NY 10112		•	ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	10/629,636	SUZUKI, MASAAKI				
omee Action Summary	Examiner	Art Unit				
The MAN INC DATE And	Alexander Markoff	1746				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	1.136(a). In no event, however, may a reply within the statutory minimum of thirty do will apply and will expire SIX (6) MONT to become ARA	(30) days will be considered timely. NDONED (35 U.S. 6.4.93)				
Status						
1)⊠ Responsive to communication(s) filed on <u>30</u>	July 2003					
· _	nis action is non-final.					
		rs prosecution as to the morite is				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•	,				
4)⊠ Claim(s) <u>17-26</u> is/are pending in the applicati	ion					
4a) Of the above claim(s) <u>21-26</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	awn nom consideration.					
6)⊠ Claim(s) <u>17-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	·					
·						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on 30 July 2003 is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119		, , , , , , , , , , , , , , , , , , , ,				
12)⊠ Acknowledgment is made of a claim for foreig. a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No. <u>08/013,014</u> .						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Burea	au (PCT Rule 17.2(a)).	octived in this National Stage				
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Attachment(s) 1) Notice of References Cited (PTO-892)	4 \□,,,,,					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	B) 🔀 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) 🖳 Notice of Informal Patent Application (PTO-152)					
S Palent and Trademark Office	6) Other:					

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 17-20, drawn to an apparatus and a method, classified in class 134, subclass 26.
 - II. Claims 21-26, drawn to an apparatus and a method, classified in class 134, subclass 26.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions of Group I and Group II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions they are not disclosed as capable of use together and they have different modes of operation. The inventions of Groups I and II directed to different embodiments disclosed by the instant application. The Invention of Group I comprises holding means and a vessel for dipping a cassette and substrates to be cleaned. Invention of Group II conveyor means, spray means and showering means, which are not required by the Invention of Group I.
- 3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Mark Williamson on 9/17/04 a provisional election was made without traverse to prosecute the invention of Group I, claims 17-20.

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Affirmation of this election must be made by applicant in replying to this Office action.

Claims 21-26 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because claim 17 requires "ultrasonic" means for irradiating the substrate with UV and "an ultraviolet washing" vessel for washing with ultrasonic. It appears that this recitation is due to an obvious mistake and the claims should recite UV exposure means and ultrasonic washing vessel.

For the examination purposes the claims were interpreted accordingly. However, clarification and/or amendment are requested.

If the applicants indeed meant "ultrasonic exposure means" and "an ultraviolet washing vessel", the claims should be considered as rejected under 35 USC 112 (1) as failing to comply with written description requirement, because such means and vessel are not supported by the original disclosure.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

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unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 17-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,651,680. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the claims of the patent is inside of the scope of the claims of the instant application.

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 63-271,938 in view of Takayama et al (US Patent No 5,071,488).

JP 63-271,938 teaches an apparatus and a method for cleaning substrates as claimed. See entire reference (English translation is provided), especially pages 6-11 of the translation.

JP 63-271,938 discloses ultrasonic washing vessel and UV exposure means, which utilize the wavelength as claimed.

JP 63-271,938 does not specifically recites the use of a cassette for immersing the glass substrates into the vessel.

However, the use of cassettes for immersing the substrates in the treatment vessels was conventional in the art, as evidenced by Takayama et al. See entire document, even the disclosure of the prior art.

It would have been obvious to an ordinary artisan at the time the invention was made to use a cassette in the apparatus and the method of JP 63-271,938 with reasonable expectation of adequate results in order to increase the efficiency of the apparatus by allowing simultaneous immersing treatment of multiple substrates hold in the cassette.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 571-272-1304. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alexander Markoff Primary Examiner Art Unit 1746

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ALEXANDER MARKOFF PRIMARY EXAMINER